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10/586,595

01/18/2007

Stijn Jozef Rita Janssens

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ALEXANDRIA, VA 22314-1176

EXAMINER

DUONG, THO V

ART UNIT

PAPER NUMBER

3744

MAIL DATE

DELIVERY MODE

11/22/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/586,595 | Applicant(s) JANSSENS, STIJN JOZEF RITA | |
| | Examiner Tho v. Duong | Art Unit 3744 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-26 and 28-31 is/are rejected.
- 7) ☒ Claim(s) 27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Applicant's amendment filed 7/12/10 is acknowledged. Claims 21-31 are pending.

Response to Arguments

Applicant's arguments with respect to claims 21-26 and 28-31 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 21-24 and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over A. Kuhn et al. (US 3,240,001) in view of Regehr et al. (US 4,175,938). Kuhn discloses (figures 1-2) a heat exchanger, comprising a housing with a bottom, an upper wall, and sidewalls, wherein onto two pairs of opposite walls, the front wall and the back wall, respectively, are connected a supply and a discharge for a gas to be cooled and wherein series of corrugated vertical walls (3) extending only from the bottom (10) up to the upper wall of the housing, and further wherein holes (5) are provided in the bottom for the discharge of the separated condensate via a collector (6); the collector extending from at least under the holes (5) to under an opening (gap in the bottom shown at 20) which is provided in the bottom between the corrugate (3) and the back wall; the collector is substantially form of U-shaped and wherein one leg of the collector is situated closest to the back wall, is connected to the side edge of the

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opening on the side of the back wall. Kuhn does not disclose crosswise extending ribs. Regehr et al. discloses (figures 1-4) a separating condensate means including a series of corrugated wall and crosswise extending ribs (11) located on the outside of a U-shaped bent part of the corrugated wall and folded back at their free end to the wall of the housing forming gutters (4) for a purpose of enhancing the separating of the liquid drop from the gas stream into a U-shaped collector (23). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use Regehr's teaching in Kuhn's device for a purpose of enhancing the separating of the liquid drop from the gas stream.

Claims 25-26 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuhn and Regehr as applied to claim 21 above, and further in view of J. P. Pietrasz (US 2,921,647). Kuhn and Regehr substantially discloses all of applicant's claimed invention as discussed above except for the limitation that a standing rib or a cross wised extending edge is provided. Pietrasz discloses (figure 1) a moisture separator that has a standing rib (3a or 6 located on edge of bottom 3 at end of A) having a cross edge on a free end, which extends over practically the entire opening on the side edge of the opening for a purpose of preventing moisture from re-entering the main steam flow. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use Pietrasz's teaching in the combination device of Kuhn and Regehr for a purpose of preventing moisture from re-entering the main steam flow.

Allowable Subject Matter

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Claim 27 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

M. F. Waters (US 2,276,277) discloses a liquid and gas separator.

E. N. Wood (US 2,252,242) discloses a gas and vapor cleaning apparatus.

J. Muchaka (US 947,393) discloses a separator.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tho v. Duong whose telephone number is 571-272-4793. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tyler J. Cheryl can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tho v Duong/
Primary Examiner, Art Unit 3744